information concerning number per year, patient age and sex at referral, cyst size, cyst site, ability to give a cytological diagnosis, surgical resection and malignant surgical resection pathology were recorded. Kendall's tau test (continuous data) or the Chi squared (categorical data) for trend test was used to determine significant changes over time.

Results 417 patients (mean age 64.3 years, 163 males) underwent EUS in our unit for the assessment of cystic lesions over the study period. There was no significant difference in patient age or sex at referral over the study period. There was a significant increase in the number of procedures per year from 2003 (n=11) to 2012 (n=74) (tau 0.556, p=0.032) but a significant decrease in cyst size from 4.75cm in 2003 to 2.2cm in 2012 (tau -0.112, p=0.001). There was a significant change in the cyst site over time mainly due to an increase in the proportion of cysts found in the body of pancreas (p for trend<0.0001). Inability to give a cytological diagnosis rates fell significantly from 45.5% in 2003 to 21.6% in 2012 (p for trend=0.0048) and surgical resection rates fell from 36.4% to 17.6% (tau -0.112, p=0.0006). The number of malignant cysts (resected or not) also decreased significantly from 11.4% to 4.1% (p for trend=0.0097).

Conclusions Cyst referrals for EUS have increased significantly but cysts are smaller, less likely to undergo resection, have a lower rate of malignancy and more likely to be in the body. Inability to give a cytological diagnosis rates also reduced significantly which may be due to improved laboratory techniques or a learning curve effect.

PWE-071 ENDOROTOR® USE TO MANAGE WALLED-OFF PANCREATIC NECROSIS; FIRST UK EXPERIENCE

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Introduction 20% of patients with acute pancreatitis develop necrosis, which has a poor prognosis and significant mortality rate. Endoscopic necrosectomy is the primary intervention in the management of walled-off pancreatic necrosis (WOPN)¹. After insertion of a lumen-apposing self-expanding metal stent (LASEMS), necrosis is removed using tools such as snares and forceps. Multiple procedures are often required, with repeated insertion of the endoscope into the cavity causing patient discomfort. EndoRotor® is a through-the-scope catheter with a rotating blade, cutting tissue which is then drawn into the catheter via suction. We present the first UK case series of EndoRotor® use for endoscopic necrosectomy. We aimed to evaluate the feasibility, safety and efficacy of its use in clearing WOPN.

Methods All procedures were performed under conscious sedation by endoscopists experienced in necrosectomy.

1. A 54 year old female developed a 19 cm x 8 cm area of WOPN as a consequence of acute pancreatitis. A LASEMS was inserted and EndoRotor® necrosectomy was performed five days later. Most of the necrotic tissue was cleared and the procedure was well tolerated. Final clearance was completed with a further snare necrosectomy 6 days later. Imaging confirmed a significant reduction in the cavity size (8cm x 2cm) and the patient was discharged.
2. A 56 year old female was admitted with acute pancreatitis and discharged home after 12 days. She was later admitted

for elective cholecystectomy but became unwell. A CT found a 28cm x 9cm area of WOPN. A LASEMS was inserted and a necrosectomy was performed two days later. All visible necrosis was removed using EndoRotor® four days later. Later examination showed some residual necrosis within a well healing cavity, requiring no further intervention.

3. A 48 year old male was admitted with acute severe pancreatitis, developing multiorgan failure requiring ICU care. A CT confirmed an 18cm x 12cm pancreatic collection and a LASEMS was inserted. The patient had four necrosectomies before having an EndoRotor® necrosectomy with good result. Two further necrosectomies were required before LASEMS removal.

Results All patients underwent EndoRotor® necrosectomy without complication. To achieve complete removal of WOPN the median number of procedures (including with EndoRotor®) was three (range 2–7).

Conclusions As EndoRotor® draws necrosis in by suction, repeated insertion of the endoscope into the cavity is not needed, allowing greater tolerability and improved clearance of necrosis. Initial experience suggests that EndoRotor® is a safe and efficient tool for clearing WOPN.

REFERENCE

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PWE-072 EUS FORK-TIP BIOPSY VERSUS EUS FNA IN THE DIAGNOSIS OF SOLID PANCREATIC MASSES

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Introduction In an attempt to overcome the limitations of Endoscopic ultrasound (EUS) fine needle aspiration (FNA) a fine needle biopsy (FNB) needle (SharkCore™) with a novel fork-tip, has been introduced. This needle is designed to increase tissue yield and preserve tissue architecture. The aim of this study was to determine if FNB histology samples had better diagnostic performance for solid pancreatic masses than FNA cytology samples.

Methods Consecutive patients referred for EUS-guided sampling of solid pancreatic lesions were recruited. Each patient had 3 passes with a standard (Beacon™) FNA needle and 3 passes with a core (SharkCore™) FNB needle performed in a randomised order. 25g needles were used for transduodenal sampling and 22g for transgastric. A single slide was made from each pass with the FNA needle and the remaining aspirate placed in CytoRich™ fluid and sent for liquid based cytological analysis. All samples from the SharkCore™ needle were placed in a single container of formaldehyde and sent for histological analysis. Samples were reported by expert cytopathologists and histopathologists respectively who were blinded to the results of the other needle. Only samples reported as diagnostic of malignancy were considered positive. Inadequate samples were not excluded from the analysis. Sample quality and ease of diagnosis were assessed on a 3 point scale. The primary endpoint was the accuracy of the diagnosis of malignancy. Secondary endpoints were the quality of sample